

APPENDIX A: DETAILS OF SELECTED PROJECTS

Provided below are brief descriptions of the current projects initiated by the Office of the Chief Technology Officer, including their goals, future plans and key metrics by which we hope to measure their success. At the end of this section is a graphic depicting the interrelationships of these projects.

A. HHSconnect

The foundation to getting the most out of our assets is collaboration, both virtual and physical. In 2012 the Chief Technology Officer, in collaboration with the Assistant Secretary for Administration, initiated the HHSconnect project (Yammer) across the Department. This program provides a secure on-line collaboration environment that allows any employee to connect with their peers. We have used the platform for many uses, including large group discussions about widely relevant topics (i.e. retirements and benefits), to simple broadcast questions to other employees across the Department. We have seen many examples of problems being solved more quickly as a result of this peer interaction. For example, when one employee was having trouble unblocking a website, he posted the problem and was immediately connected to the right person to solve the problem (normally this process may have taken days, but here it took a matter of hours). We have even seen examples of Department leaders use the HHSconnect platform to get feedback from employees in preparation for a speech he was crafting. Our ultimate goal is for every employee to create an account on the platform and use it effectively in their course of daily work. We are in the process of developing metrics that will allow us to move from simply measuring the number of registered users to metrics on new collaborations.

B. HHSlabs

Physical space is critically important to promote effective in-person collaboration. The spaces available in current Department facilities are not at all conducive to the kind of 21st century efforts we are espousing. To promote effective in-person collaboration we are planning to establish HHSlabs, which is an innovation zone modeled after the open plan workspaces effectively utilized by modern and nimble organizations. This area will offer employees and stakeholders a physical space where they can work together to test out ideas, conduct brainstorming sessions, and collaborate in other ways without artificial or physical barriers. Ideally, as a public good, the innovation zone will be available to those outside of the Department thereby allowing for enhanced collaboration with external stakeholders and collaborators. Working with the Assistant Secretary for Administration, our goal in the next year is to locate a suitable space for HHSlabs and offer it on a pilot basis to a limited number of groups within the organization. As with many of our projects, our plan is to build this program iteratively by starting with a minimum viable prototype (in this case the simplest functional lab space we can develop on a minimal budget) and refining it based on the needs and wishes of our user-base.

C. HHSentpreneurs

Once we have the foundations of effective collaboration built, we need to identify the internal innovators and connect them to resources, mentoring and environment needed to act upon their ideas. To this end, we launched the *HHSentpreneurs* program last year with the express intent of selecting high-priority problems and allowing entrepreneurial teams to form around these issues. This program enables our agencies to recruit external experts and entrepreneurs to work with HHS staff on some of the Department's toughest challenges. *HHSentpreneurs* provides a novel approach to attract outside talent to the Department and to incorporate open innovation concepts to bring the best ideas from all sectors. In addition to accelerating the completion of high-profile projects, *HHSentpreneurs* encourages career federal employees to learn and apply formal project methods used to boost innovation, such as agile software development and lean production. We are just closing out the first four projects from the first round of the program and can report excellent results from the teams.

We are using this program, and applications submitted by our agencies, as a window into understanding the most vexing problems facing our agencies and the skill sets their staff believe would help them resolve their challenges. We have been analyzing the needs for additional expertise and plan to use this information to direct future educational efforts.

Projects have been submitted for the second round of *HHSentpreneurs* and we anticipate putting out a call for the next cohort of external applicants in July 2013.

D. HHSignite

Earlier this year, we launched *HHSignite*, a new Department-wide seed-funding program to support early stage projects that test the feasibility of new concepts in solving existing problems. This pilot will provide \$10,000 to 8 teams who have early stage ideas designed to be tested in no more than three to six months.

In the first round, we received 66 applications from HHS employees – more than three times what we were expecting. We are particularly encouraged by the wide range of ideas proposed by our employees and with the high rate of engagement, which was demonstrated by the fact that each operating division, including most staff divisions, submitted proposals. Assuming the first round is successful, our goal for the coming year is to double the portfolio, so that we can provide up to 16 awards. In addition to growing the program, we are in the process of developing metrics to assess the program from the perspective of both the participants and the managers. We will be looking at inputs (e.g. type of project and the diversity of teams) to the outputs (e.g. completion rate and number of pilots that lead to usable proofs-of-concept) as well as operational and efficiency indicators.

E. HHSfairtrade

We are currently in the process of developing and pilot testing an internal platform called *HHSfairtrade*, which would allow internal innovators to post new ideas and solicit pledges of resources from other internal entities who are interested in assisting. These pledges could include in-kind contributions, such as staff-time or a willingness to serve as a testing site, or more traditional resources, such as use of space or financial backing. The idea for such a platform came from one of our own innovators whose team had won the *HHSinnovates* contest described below. We have followed the trajectory of so-called “crowdfunding” platforms in the commercial world, and believe they may have applicability to innovating in health and human services – both internally to the Department and externally.

Assuming resources can be found, our goal for the coming year is to develop a prototype that we can pilot and demonstrate proof-of-concept among the employee base. We have begun working with the Informatics Laboratory at the Centers for Disease Control and Prevention to develop wire frames and have established a working group to consider policy and implementation issues necessary to carry out the initiative.

F. HHScompetes

We recognize that, while HHS employees have many good ideas, these ideas can be further leveraged by engaging non-federal stakeholders through open innovation. Our office has been responsible for implementing the concept of challenge competitions across the Department by establishing administrative and policy infrastructure to conduct challenge competitions. The *HHScompetes* program, conducted in partnership with all operating divisions, has enabled over 100 competitions. Since the establishment of the challenge program in 2011, our agencies have helped sparked the development of many innovative mobile apps, health campaigns and technology platforms—tools that likely would not have been developed by the government alone. Perhaps most exciting is the range of solutions providers who have participated. Winners of HHS challenge competitions have included many nontraditional players such as students, retired workers, young companies and entrepreneurs who would have never considered, let alone been eligible, to apply for a traditional grant or contract. In fact, last year, the Department was awarded the Case and Joyce Foundations Prize for Excellence in Promoting Innovation through Prize Competitions.

Our goal is to formalize the challenge program by providing it with a functional home within the Assistant Secretary for Administration. The responsibilities focus on outreach to the agencies, training of employees on challenge design, and working with the agencies to develop a blanket purchasing agreement so that our units can easily contract with outside challenge management firms to assist in the running of large-scale competitions. This arrangement will allow for challenge competitions to achieve the goal of becoming the third leg on the acquisition toolbox, taking its rightful place next to grants and contracts as a nimble mechanism to bring about new solutions.

G. Health Data Initiative

Perhaps even more significant than our challenge program in leveraging the power of our external partners has been the innovation we have helped to unleash through our Health Data Initiative. Our office has played an important role in creating value out of our health data through continued efforts to educate the public about our data and what can be done with it. Internally, we have worked with data leads across HHS to identify high-value data sets that are ripe for release. Externally, we work closely with the Health Data Consortium and private partners to develop an ecosystem around health data. Furthermore, our group played a central role in organizing and overseeing the Health Datapalooza series of conferences. This year, we engaged over 2,000 in-person attendees and thousands of virtual attendees coupled with 31 million impressions made from those receiving communications about the event.

To date, significant effort has gone into making a large volume of data available from various agencies in multiple formats for public consumption and innovation. Over the coming year, the Health Data Initiative will adjust its focus to efforts in three specific areas:

- 1) *Strategically focused liberation.* We will be increasing emphasis on liberating data sets that are deemed to be high value and/or are of strategic importance;
- 2) *Appropriate dissemination.* The Healthdata.gov platform will be re-engineered in order to enable greater access to data and more robust communications about the value and utility of the data; and
- 3) *Data education.* Increasing educational outreach efforts around our data will reach both internal and external audiences over a variety of channels.

The Health Data Initiative will accumulate knowledge from departmental colleagues about the data assets we control, and disseminate the knowledge about data as an asset. We are also developing a series of process and outcome metrics to measure our success in accelerating the pace of innovation and system transformation through further development of the Health Data Initiative. These will focus on process metrics such as response time to public inquiries, metadata quality, educational material use, dataset delivery timeline and outcome measures such as data access, impacts on health care access and quality, data utilization, demand for data sets and creation of tools.

H. HHSinnovates

Rewards and recognition are fundamental elements that are integral to incentivizing innovation along with the sharing of good ideas. The HHSinnovates program is our ultimate way of recognizing meritorious activities and highlighting them to HHS leadership and the broader community of stakeholders. Since the program was launched we have identified over 500 promising endeavors, with 36 of them rising to the level of Secretarial award. A number of these solutions have gone onto broad adoption and commercial success, in some cases as a direct result of the exposure the innovations received from our program. We have also used our role as convener and matchmaker to “introduce” components of the Department that otherwise would not have collaborated.

For example, the National Institutes for Diabetes and Digestive and Kidney Diseases at NIH was deemed a finalist for development of the Body Weight Simulator, a tool to help create personalized weight management programs. During the awards ceremony a member of the leadership team suggested that this tool could have applicability to federal employees and suggested that we broker a conversation with the Federal Occupational Health unit to discuss the idea of piloting this tool among the federal workforce.

Based on feedback from our employees, we are moving to an annual cycle for the HHS*Innovates* program, with the HHS*Signite* program that provides seed funding to be run on an alternate cycle. We believe this will more fully cover the innovation spectrum by providing employees with seed funding to test good ideas and the rewards for those that are truly innovative. One area we would like to further explore in the coming year with HHS*Innovates* is the idea of recognizing experiments that were not successful, but generated effective learning.

I. HHS Innovation Council

To help identify barriers to innovation and promote crosscutting solutions involving policy change and project execution, in collaboration with the Assistant Secretary for Administration, we oversee the HHS Innovation Council. This is a chartered body that reports directly to the Secretary and Deputy Secretary, with innovation representatives from every unit across HHS. The Council meets monthly and selects two to three new initiatives to delve into each year. The Council has had tremendous success overseeing and implementing the Open Government Initiative as well as exploring innovation interests, such as crowdfunding and providing technical help to agencies through individualized consults by staff members. In addition, each month the Council brings in an outside speaker, either from the private sector or another part of the government, to introduce the Council to new thinking about innovation. We will continue identifying new topics to explore, such as the power of networks in health care and new forms of interactions with the private sector.

Relationship of Innovation Projects

